

Electric Choice Question 3: *What is the experience with retail electric choice in other states / provinces / countries in terms of customer participation, rates, savings, competitive providers, and other characteristics? How was the transition to choice, to full restructuring, or to re-regulation handled from an implementation standpoint?*

---

## **Executive Summary**

### **I. Retail electric choice (retail access / deregulation) in the U.S. has resulted in (1) inconsistent customer participation, (2) few clear drivers of savings for customers, (3) financially struggling deregulated power providers, and (4) concerns about electric reliability**

#### **1. Inconsistent customer participation**

- Participation in retail access varies with commodity cycles, creating instability and uncertainty for both regulated and deregulated providers
- Customer participation in deregulated generation options (retail access) today is at its historically highest level due to low deregulated (wholesale) market power prices, but still only 12% of U.S. customers (22% of electric load) is served by a deregulated provider
- Retail access tends to benefit a small subset of customers, generally the large industrials, with very limited participation by small business and residential customers

#### **2. Few clear drivers of savings for customers**

- Deregulation has not led to lower rates. Electric rates are higher on average in deregulated states than in regulated states and have grown at the same pace since deregulation began
- The deregulated model often requires severe price spikes to allow electric generators to recover investments in the system. When prices are not expected to be high enough over adequate periods of time, reliability is at risk because deregulated electric generators will not invest
- In Michigan's partial retail access model, as some customers exit the regulated system, the customers that remain at the utility unfairly bear a larger burden of the fixed costs of reliability

#### **3. Financially struggling deregulated power providers can lead to electric reliability concerns**

- Deregulated providers have struggled financially in deregulated markets, both in the current low power price environment and over time. Financial difficulties reduce these providers' ability to invest in reliability
- Deregulated states are facing reliability concerns as deregulation has not incented sufficient investment for the desired level of reliability

### **II. The implementation of retail access/deregulation has been fraught with challenges. In the decade following the disaster of California's energy crisis, many states that had started down the path of deregulation re-regulated – some prior to fully implementing deregulation plans**

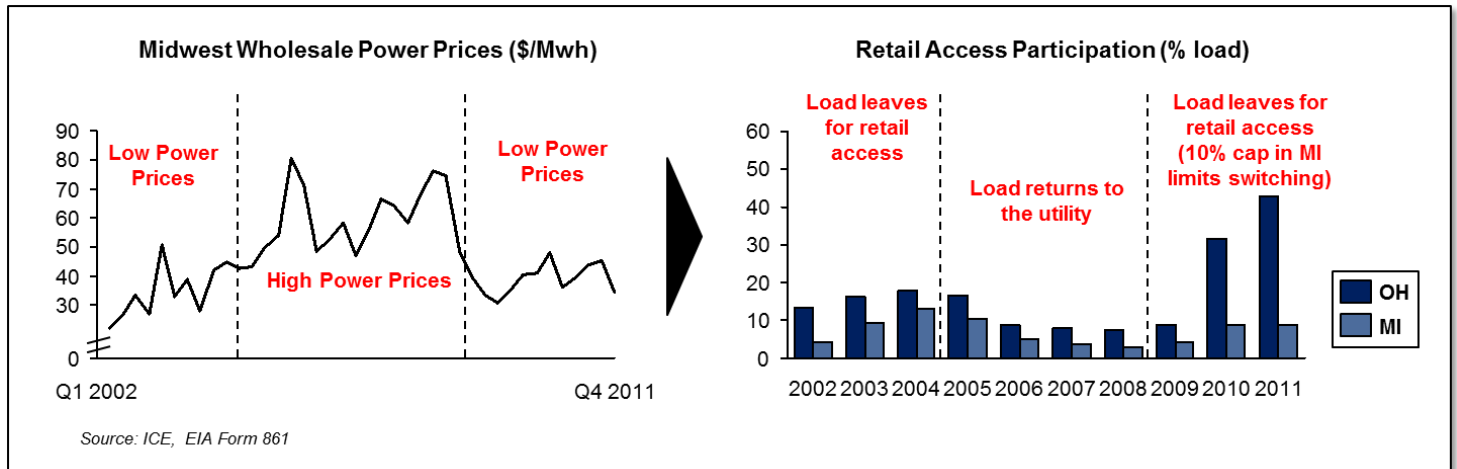
Electric Choice Question 3: *What is the experience with retail electric choice in other states / provinces / countries in terms of customer participation, rates, savings, competitive providers, and other characteristics? How was the transition to choice, to full restructuring, or to re-regulation handled from an implementation standpoint?*

- I. Retail access in the U.S. has resulted in (1) inconsistent customer participation, (2) few clear drivers of savings for customers, (3) financially struggling deregulated power providers, and (4) concerns about electric reliability.**

**1. Inconsistent customer participation**

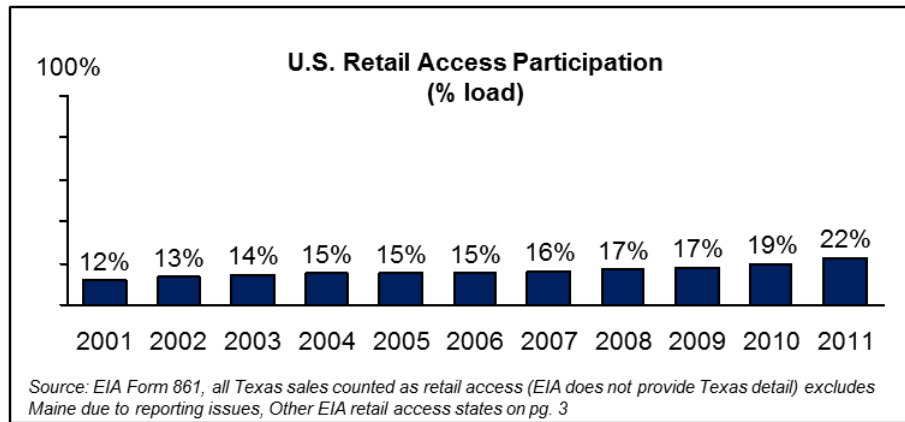
- Participation in retail access varies with commodity cycles, creating instability and uncertainty for both regulated and deregulated providers.

In a partial retail access model - like Michigan's (and Ohio through 2011) - where a regulated rate option is available, customers switch between the lower of deregulated market rates or regulated rates as commodity cycles change. This creates huge load variability and uncertainty for utilities, limiting their ability to invest in long-term reliability. Michigan's current 10% cap on switching reduced this uncertainty.



Electric Choice Question 3: *What is the experience with retail electric choice in other states / provinces / countries in terms of customer participation, rates, savings, competitive providers, and other characteristics? How was the transition to choice, to full restructuring, or to re-regulation handled from an implementation standpoint?*

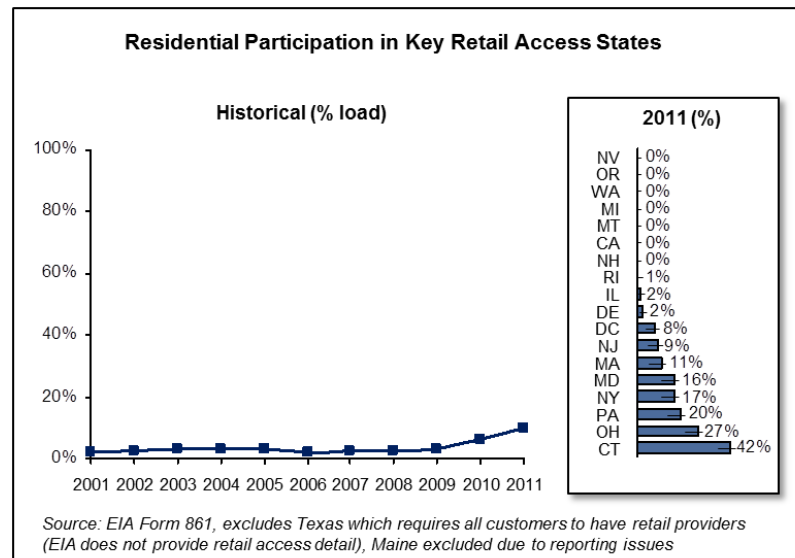
- Customer participation in retail access today is at its historically highest level due to low deregulated (wholesale) market power prices, but still only 12% of U.S. customers (22% of electric load) is served by a deregulated provider. Today, the large majority of states are largely or fully regulated.



- Retail access tends to benefit a small subset of customers, generally the large industrials, with very limited participation by small business and residential customers.

In jurisdictions that allow all customers to choose between regulated and deregulated market rates, there is relatively little switching among residential and other small customers. Even post-2009, as deregulated (wholesale) market prices have decreased significantly in response to the decline in natural gas prices, residential participation in key retail access states (as provided by EIA) has remained below 10% of residential load in the majority of those states.

Studies suggest that the transaction costs and risks of switching outweigh the benefits to residential and other small customers, even if a lower rate is available through a retail supplier.

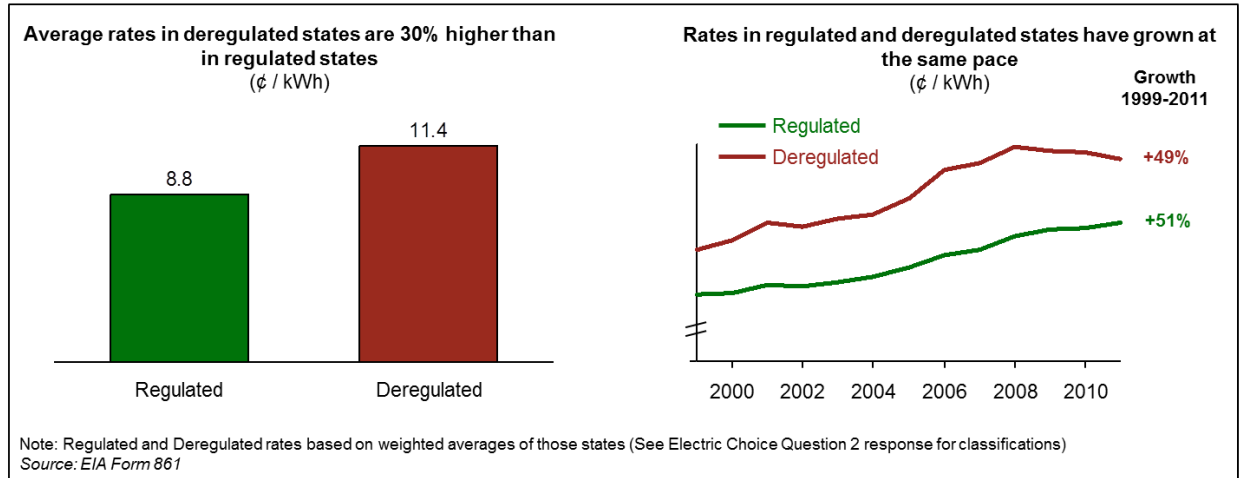


(See Electric Choice Question 12 response for data and findings around the preferences of residential and small business customers not to switch to retail access)

Electric Choice Question 3: *What is the experience with retail electric choice in other states / provinces / countries in terms of customer participation, rates, savings, competitive providers, and other characteristics? How was the transition to choice, to full restructuring, or to re-regulation handled from an implementation standpoint?*

## 2. Few clear drivers of savings for customers

- Deregulation has not led to lower rates. Electric rates are higher on average in deregulated states than in regulated states and have grown at the same pace since deregulation began.



- The deregulated model often requires severe price spikes to allow electric generators to recover investments in the system. When prices are not expected to be high enough over adequate periods of time, reliability is at risk because deregulated electric generators will not invest.

Deregulated generators will not invest without high enough prices to allow recovery of investment because their motivation is profit.

*“Suppliers [deregulated generators] recover their investment costs through periodic severe price spikes”<sup>1</sup>* (MISO market prices saw nearly 400% variability from 2001 to 2012 as gas price commodity cycles spiked in 2005 and again in 2008.)

*“Investors’ basic requirement is that they can expect future revenues to be high enough, often enough, to cover the costs of building a plant, including a return on capital commensurate with risk”<sup>2</sup>*

Source: <sup>1</sup>The Brattle Group, “A Comparison of PJM’s RPM with Alternative Energy and Capacity Market Designs” September 2009 and <sup>2</sup>The Brattle Group, “ERCOT Investment Incentives and Resource Adequacy” June 2012

Electric Choice Question 3: *What is the experience with retail electric choice in other states / provinces / countries in terms of customer participation, rates, savings, competitive providers, and other characteristics? How was the transition to choice, to full restructuring, or to re-regulation handled from an implementation standpoint?*

---

- In Michigan's partial retail access model, as some customers exit the regulated system, the customers that remain at the utility unfairly bear a larger burden of the fixed costs of reliability.

More than 99% of Michigan customers pay an extra ~\$300 million every year to subsidize a small number of customers on retail access. If Michigan's 10% cap were to be increased, this dynamic would be amplified, with most customers absorbing an even larger share of system costs for the benefit of a handful of customers.

### **3. Financially struggling deregulated power providers can lead to electric reliability concerns**

- Deregulated providers have struggled financially in deregulated markets, both in the current low power price environment and over time. Financial difficulties reduce these providers' ability to invest in reliability.

Deregulated power producers have experienced significant financial distress since deregulation began around 2000. The volatility of power prices has led to numerous bankruptcies of large deregulated generators. In today's low power price environment, companies that have managed to avoid bankruptcy have curtailed investment in generation given weak power price outlooks and their inability to recover their investments. Deregulated generators make these decisions based on financial concerns first and foremost – not reliability impacts.

(See Electric Choice Question 6 response for detailed description and examples of deregulated generators' financial difficulties)

Electric Choice Question 3: *What is the experience with retail electric choice in other states / provinces / countries in terms of customer participation, rates, savings, competitive providers, and other characteristics? How was the transition to choice, to full restructuring, or to re-regulation handled from an implementation standpoint?*

---

- Deregulated states are facing reliability concerns as deregulation has not incented sufficient investment for the desired level of reliability.

Reliability of the electric system must be considered when evaluating experiences with retail access. Texas, Maryland, and New Jersey, deregulated states, are now facing reliability concerns in today's low power price environment, in which the deregulated market has not incented sufficient investment in generation. New Jersey and Maryland have had to intervene with guaranteed state-sponsored contracts that reflect extreme regulation far beyond traditional reasonable regulation. These extreme regulatory solutions became necessary because of the market failures of deregulation to provide for reliability.

(See Electric Choice Question response 7 for detailed information on the reliability concerns faced under deregulation)

**II. The implementation of retail access / deregulation has been fraught with challenges. In the decade following the disaster of California's energy crisis, many states that had started down the path of deregulation re-regulated, some prior to fully implementing deregulation plans.**

In the late 1990s, in the pursuit of lower electric rates, California began the first experimentation with deregulation in the United States. The California Energy Crisis quickly followed:

*"In the spring and summer of 2000, a kind of "perfect storm" hit the energy market in California. A heat wave sent demand soaring, and the combination of a lack of new power plants built over the last 10 years, a drought that cut back the amount of hydroelectric power available to the state, and the inability of outside power generators to supply enough power to the state caused wholesale prices to skyrocket."*

*"Electricity supplies to the state were tight and, as a result, rolling blackouts hit in January 2001 for two straight days."*

Electric Choice Question 3: *What is the experience with retail electric choice in other states / provinces / countries in terms of customer participation, rates, savings, competitive providers, and other characteristics? How was the transition to choice, to full restructuring, or to re-regulation handled from an implementation standpoint?*

*“Five years after the legislation was signed into law, with the very utilities that lobbied for deregulation filing for bankruptcy and consumers paying almost twice what they did before, the current Governor of California, Gray Davis, is fighting for his political life. Deregulation in California backfired.”*

Source: PBS Frontline and The New York Times, “Blackout: What caused the power crisis in California? And who’s profiting”, pbs.org

The California Energy Crisis had severe political and socio-economic impacts that resulted in the recall of the Governor, billions of dollars in lost economic value, and the jeopardized safety of customers.

## Impacts of the Energy Crisis in California

Los Angeles Times

*“Computers crashed. Traffic signals went out. Stores and restaurants were forced to close over the busy lunch hour, or make do under primitive conditions”*

*“Blackout contributed to a traffic accident...The 21-year-old driver of a car that rolled over three times was hospitalized”*

SFGate

*“It’s a tense time for the sick when utilities decide to cut electricity”*

*“[Madison Cashman, 4] stops breathing when she sleeps and needs the electrically powered ventilator to breathe for her while she sleeps”*

The New York Times

*“New details [were provided] of market manipulation during the California energy crisis that produced blackouts and billions of dollars of surcharges to homes and businesses on the West Coast in 2000 and 2001”*



*“At companies like Sun Microsystems, Inc., a blackout can cost as much as \$1 million per minute”<sup>2</sup>*

*“According to the Silicon Valley Manufacturing Group, an industry association of 190 high tech companies, the January blackouts left 100,000 employees idle, costing tens of millions of dollars”*

CNN.com

*“California’s electricity crisis of 2000 helped spark an unprecedented recall election three years later aimed at ousting Democratic Gov. Gray Davis.”*

**“Blackouts are both inefficient and indiscriminate – they affect wealthy and poor, healthy and infirm, young and old, equally.”<sup>1</sup>**

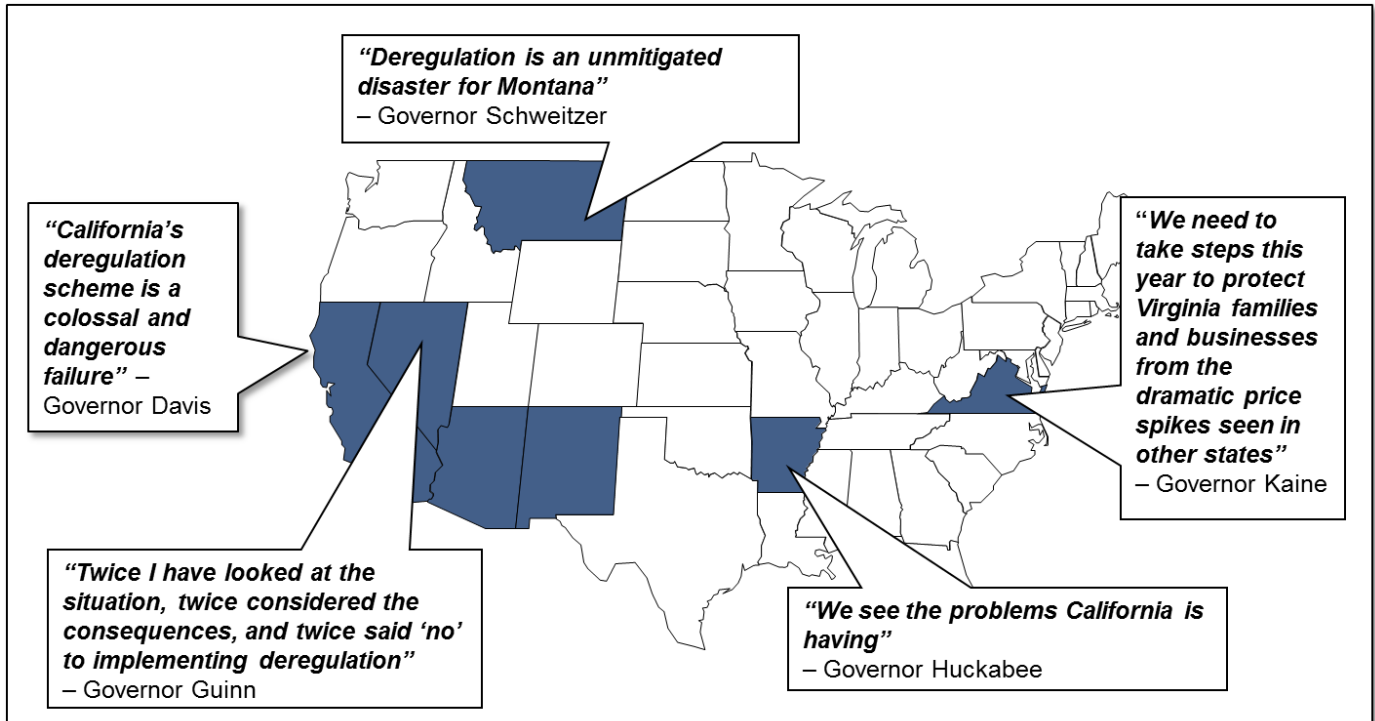
**“A power interruption can lead to a number of social ills, such as compromised fire and police protection, lack of proper sewage treatment, and, in some cases, shuttering of health services.”<sup>1</sup>**

(1)(2) Bay Area Economics Forum and McKinsey & Company, “The Bay Area – A Knowledge Economy Needs Power”, April 2001 (2) original source Silicon Valley Power, qtd San Jose Mercury News

Electric Choice Question 3: *What is the experience with retail electric choice in other states / provinces / countries in terms of customer participation, rates, savings, competitive providers, and other characteristics? How was the transition to choice, to full restructuring, or to re-regulation handled from an implementation standpoint?*

---

Seven states, including California, re-regulated after passing deregulation legislation to escape deregulation's challenges – some states prior to full implementation of deregulation.



- Arkansas, Virginia, New Mexico, Nevada, and Arizona re-regulated prior to separating generation from the utility; these states now operate in practice as regulated models
- California and Montana fully transitioned to deregulation before re-regulating
  - California re-regulated by entering above-market power contracts through the state, suspending future retail access, and allowing utilities to re-contract for and in some cases own generation; in 2010, additional load up to a cap (~13%) was able to begin switching providers
  - Montana re-regulated by eliminating future retail access and allowing the utilities to have regulated generation

Many deregulated states that did not re-regulate faced significant price spikes after the expiration of rate freezes which held rates low for periods of time as part of deregulation transition plans. (See Electric Choice Question 5 response for detail)